



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/564,303

01/10/2006

Akio Uchiyama

19476

8935

45307 7590 02/26/2008
SCULLY, SCOTT, MURPHY & PRESSER, P.C.
400 GARDEN CITY PLAZA
SUITE 300
GARDEN CITY, NY 11530

EXAMINER

DANEGA, RENEE A

ART UNIT

PAPER NUMBER

3736

MAIL DATE

DELIVERY MODE

02/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,303	Applicant(s) UCHIYAMA ET AL.	
	Examiner RENEE DANEGA	Art Unit 4111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 34-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 34-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/10/06, 11/5/07, 11/19/07, 1/7/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 18-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected in-vivo information acquisition apparatus, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 1/07/08.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4, 6, 13-14. and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujita et al (US 20030085994).
 - Regarding claim 1, Fujita teaches embodiments of an in vivo information acquisition apparatus with specimen collecting sections (113, 126), a specimen evaluating section (114), a labeling section (claim 36), and a communication section (23) (Figures 8b, 18, 20) and any combination of these features [0194].
 - Regarding claim 4, gain control circuit (41) controls power amplification [0062].

- Regarding claim 6, Fujita teaches a medicine accommodating portion (124) and dosing portion (128) that would be capable of storing and releasing a biocompatible adhesive (Figure 20).
- Regarding claim 17, Fujita teaches an image-pickup element (17) [0051].

4. Claims 34, 36, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Schulman et al. (US 6695885).

- Regarding claim 34, Schulman teaches a method for acquiring in vivo information comprising introducing a plurality of in-vivo acquisition apparatuses into a body cavity, acquiring in vivo information from each of the apparatuses, and transmitting the information acquired outside the body wherein each apparatus has an identification address (claim 1).
- Regarding claims 36 and 37, Schulman teaches a step of acquiring in vivo information comprising emitting a signal from outside the body and receiving the signal using the plurality of in-vivo information acquisition apparatuses and responding based on this signal at substantially the same time by transmitting outside the body in a close looped manner (claim 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita as applied to claim 1 above, and further in view of Gazdzinski (US 20010051766).

- Regarding claims 2-3, Fujita doesn't teach the labeling section to have a tag or the tag to be RF-ID. However, Gazdzinski teaches an endoscopic probe with an RFID tag which allows for the writing or reading of multiple probes simultaneously [0223]. It would have been obvious in view of Gazdzinski for the labeling section of Fujita to be an RFID tag in order to determine where communicated information was coming from.

7. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita as applied to claim 1 above, and further in view of Schulman et al. (US 6695885).

- Regarding claim 7, Fujita doesn't teach an external power supply section. However, Schulman teaches an external power supply charger (118) that wirelessly transmits energy (Figure 1). It would have been obvious in view of Schulman to provide for external energy transmission so that the acquisition apparatus of Fujita doesn't run out of energy should it need to stay in the body for an extended period of time.
- Regarding claim 8, Fujita teaches using batteries (21) to supply power (Figure 2).

8. Claims 5, and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita as applied to claim 1 above, and further in view of Alfano et al. (US 6240312).

- Regarding claim 5, Fujita doesn't teach an indwelling section for fixing to a tissue surface. However, Alfano teaches an in vivo medical diagnosis device with a indwelling or feeler (53) described as a "suction type conveyer" capable of fixing to a tissue surface. It would have been obvious in view of Alfano to provide an indwelling to control movement and fixation of the device of Fujita along its test path.
- Regarding claim 10, Fujita doesn't teach the specimen evaluating section to include a photodetector. However, Alfano teaches an examining means comprising a photodetector (claim 23) to determine abnormalities or diseased states of a tissue (column 4, lines 11-15). It would have been obvious in view of Alfano to use a photodetector in the specimen evaluating section of Fujita for determining optical change.
- Regarding claim 11, Fujita teaches an illumination system in the device in order to have natural color reproduction of the tissue image [0115].
- Regarding claim 12, Fujita teaches the illumination system being wavelength tunable via a yellow correction filter and value modulation type image sensor as well as correction of the white LED [0115].
- Regarding claims 13 and 14, Fujita teaches detecting units including blood sensor and hemoglobin (protein) sensors [0173].

9. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita and Alfano as applied to claim 10 above, and further in view of Nair et al. (US 20020132226).

- Regarding claim 15, Fujita and Alfano don't teach the specimen evaluating section to function as an enzyme sensor. However, Nair teaches an electronic ingestible capsule with an enzyme sensor [0018]. It would have been obvious in view of Nair to provide for an enzyme sensing function in order to detect a condition in the body.
- Regarding claim 16, Fujita and Alfano don't teach the specimen evaluating section to function as a gene sensor. However, Nair teaches an electronic ingestible capsule with an antigen sensor [0018] and further explains that antigens are the products of specific genes [0021]. It would have been obvious in view of Nair to provide an antigen sensor to detect the presence of specific genes.

10. Claims 35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulman et al. as applied to claim 34 above, and further in view of Schentag et al. (US 5279607).

- Regarding claim 35, Schulman teaches a plurality of in vivo acquisition apparatuses in a body cavity. Schulman doesn't teach releasing them by introducing a medical capsule containing them into the body. However, Schentag teaches ingesting a capsule storing a medicament and releasing

the medicament at a selected site in the body (claim 32). It would have been obvious in view of Schulman to release the in vivo acquisition apparatus via this method into the body in order to be able to place them in hard to access regions.

- Regarding claim 38, Schulman doesn't teach releasing an in vivo information apparatus by detecting the position of the capsule medical apparatus. However, Schentag teaches tracking a capsule through the body and detecting a position causing the release of the medicament from it (claim 32). It would have been obvious in view of Schentag to release the in vivo acquisition apparatus via this method into the body in order to be able to place them in hard to access regions.

Allowable Subject Matter

11. Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The examiner was unable to find a shutter driven by an ion conducting actuator.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RENEE DANEGA whose telephone number is (571)270-3639. The examiner can normally be reached on Monday through Thursday 7:30-5:00 eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RAD

/Max Hindenburg/
Supervisory Patent Examiner, Art Unit 3736